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(54) Title: THERMALLY-PROTECTIVE INTUMESCENT COATING

(57) Abstract

An intumescent coating system and method therefor are disclosed for thermally protecting a substrate exposed to fire. The instant coating system has a first component which forms a rigid carbonific char foam having toughness, and a second component which forms an insulative carbonific char foam having about half the density of the rigid carbonific foam. The two foams may be separately applied as, respectively, an inner coating layer coated and cured on the substrate, and an outer coating layer coated and cured on the inner film layer. Alternatively, the two foams are provided as a blend to comprise a single coating layer which is coated and cured on the substrate. While one foam component protects the substrate from breakthrough and direct exposure to fire conditions, the other insulates to protect it from heating by fire conditions, thus offering flame retardancy at film thicknesses of less than 1.27 mm (50 mils).

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Υ .	US, A, 4,663,226 (VAJS ET AL) 30, 60-col.2, line 8, 32-col.3, Figs.	5 May 1987, col.1, lines 9- line 20, 37-col.5, line 24;	1-21					
Y	US, A, 5,004,632 (MCGARVEY	ET AL) 2 April 1991	1, 3-7,9-14					
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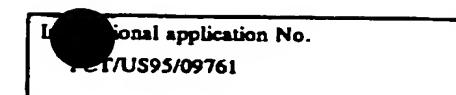
INTERNATIONAL SEARCH REPORT

pational application No. I/US95/09761

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
4	US, A, 3,955,987 (SCHAAR ET AL) 11 May 1976.	1-14
١.	US, A, 4,069,075 (BILLING ET AL) 17 January 1978.	1-14
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Thi	is international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:	
1.	Claims Nos.: 22 because they relate to subject matter not required to be searched by this Authority, namely:	
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3.	Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).	
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This	International Searching Authority found multiple inventions in this international application, as follows:	
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	No protest accompanied the payment of additional search fees.	

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INTERNATIONAL SEARCH REPORT

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